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<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional)  SE0039							
<p>I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]</p> <p>on <u>October 17, 2008</u></p> <p>Signature <u>/Christine Gillroy/</u></p> <p>Typed or printed name <u>Christine Gillroy</u></p>		<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 50%; padding: 5px;">Application Number  10/730,681</td><td style="width: 50%; padding: 5px;">Filed  December 8, 2003</td></tr><tr><td colspan="2" style="padding: 5px;">First Named Inventor  Joon-Kit Goh</td></tr><tr><td style="padding: 5px;">Art Unit  2135</td><td style="padding: 5px;">Examiner  Nirav B. Patel</td></tr></table>		Application Number  10/730,681	Filed  December 8, 2003	First Named Inventor  Joon-Kit Goh		Art Unit  2135	Examiner  Nirav B. Patel
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First Named Inventor  Joon-Kit Goh									
Art Unit  2135	Examiner  Nirav B. Patel								
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <table style="width: 100%;"><tr><td style="width: 50%; vertical-align: top;"><p><input type="checkbox"/> applicant/inventor.</p><p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p><p><input checked="" type="checkbox"/> attorney or agent of record.      36,981 Registration number _____</p><p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p></td><td style="width: 50%; vertical-align: top;"><p><u>/Thomas G. Eschweiler/</u></p><p>Signature</p><p><u>Thomas G. Eschweiler</u></p><p>Typed or printed name</p><p><u>(216) 502-0600</u></p><p>Telephone number</p><p><u>October 17, 2008</u></p><p>Date</p></td></tr></table> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.</p>				<p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record.      36,981 Registration number _____</p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p>	<p><u>/Thomas G. Eschweiler/</u></p> <p>Signature</p> <p><u>Thomas G. Eschweiler</u></p> <p>Typed or printed name</p> <p><u>(216) 502-0600</u></p> <p>Telephone number</p> <p><u>October 17, 2008</u></p> <p>Date</p>				
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<p><input type="checkbox"/> *Total of _____ forms are submitted.</p>									

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Docket No. AMDP782US

SE0039

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re **PATENT** application of:

Applicant: Joon-Kit Goh

Application No.: 10/730,681

For: TRIPLE DES CRITICAL TIMING PATH IMPROVEMENT

Filing Date: December 08, 2003

Examiner: Nirav B. Patel

Art Unit: 2135

**PRE-APPEAL REQUEST FOR REVIEW IN RESPONSE TO  
ADVISORY ACTION DATED OCTOBER 6, 2008**

Mail Stop AF  
Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Favorable reconsideration of the above-identified application is respectfully requested in view of the following amendments and remarks.

**REMARKS**

Claims 1, 3-26 are pending. No claim amendments are made with this response. Reconsideration of the application is respectfully requested based on the following remarks.

**I. REJECTION OF CLAIMS 1, 3-4, 6, 9-21, 23 AND 26 UNDER 35 U.S.C. § 103(a)**

Claims 1, 3-4, 6, 9-21, 23 and 26 were rejected under 35 U.S.C. § 103(a), as being unpatentable over U.S. Patent No. 7,142,671 (Qi et al.) in view of U.S. Patent No. 7,280,657 (Anand). Withdrawal of the rejection is respectfully requested for at least the following reasons.

- i. ***Neither Qi et al. nor Anand teach the cipher output of the eight cipher blocks feedback coupled to the second input of the data input multiplexer and to the first input of a pre-data output multiplexer, as recited in claims 1 and 19.***

Claims 1 and 19 are directed to a security processing circuit that comprises a DES engine. The DES engine further comprises eight cipher blocks operable to output first and second results of a sequential eight step cipher process during a first and second eight step cycle of each of the three DES processing operations. The cipher output of the eight cipher blocks is ***feedback coupled to the second input of the data input multiplexer and to the first input of a pre-data output multiplexer*** to facilitate the 3DES processing. One non-limiting example of this feature is illustrated in Fig. 1J of the present application, wherein an output of the cipher blocks 81d is feedback coupled to a data-in (DI) mux 81b and also coupled to a pre-data output (PDO) mux 81e. Neither Qi et al. nor Anand teach this structural feature.

Referring to Figs. 4A and 4B of Qi et al., the cited reference teaches a feedback timing critical path 451 which feeds only right side cipher data back to an input mux 409 ***without any such additional structural interconnection directly to a pre-data output mux***. Rather, the feedback path 451 only connects a Right last round register

435 to an input mux 409. In addition, ***no pre-data output multiplexer to receive the cipher results is provided in either Qi et al. nor Anand as claimed.*** Therefore neither Qi et al. nor Anand teach the invention of claim 1 and 19.

The Office Action dated 07/18/08, in the "Response to Arguments" section page 15 (last line) through page 16, first paragraph, points out (See, e.g., MPEP § 707.07(f), paragraph 7.37.09) that "A recitation of the intended use of the claimed invention must result in ***structural difference*** between the claimed invention and the prior art in order to ***patentably distinguish*** the claimed invention from the prior art." The applicant agrees with the examiner in this regard, and further with the Office Action which concedes on page 16 that "***the prior art Qi and Anand have different structures from the claimed invention but they perform a similar function and provide similar results as claimed***". Here again, the applicant agrees that the claimed invention has, in fact, numerous structural differences (e.g., as indicated above) over the prior art. Because claims 1 and 19 are directed to structures, it is the structural distinctions and not their functionality that distinguishes the claimed invention over the cited prior art. Whether Qi et al. or Anand, or both, operate similarly is not relevant to whether they teach or suggest the structural limitations highlighted above in the pending claims. Therefore, as set forth above, and as conceded in the final Office Action of 07/18/08, the cited prior art do not teach the above claim feature of claims 1 and 19, and therefore the claims are non-obvious thereover. Accordingly, withdrawal of the rejection is respectfully requested.

In addition to the structural differences highlighted above, claims 1 and 19 further provide other structurally distinguishing elements, for example:

- 1) ***wherein the latched data output of the intermediate result register is coupled to the data input of the eight cipher blocks,***
- 2) ***the data selection output of the pre-data output multiplexer coupled to the pre-data output register,***

- 3) ***the latched data output of the pre-data output register feedback coupled to the second input of the pre-data output multiplexer and the pre-data output.***

In one non-limiting example of Fig. 1J of the present invention, ***the latched data output of the intermediate result register (81c) is coupled to the data input of the eight cipher blocks (81d), the data selection output of the pre-data output multiplexer (81e) coupled to the pre-data output register (81f), the latched data output of the pre-data output register (81f) feedback coupled to the second input of the pre-data output multiplexer (81e) and the pre-data output (e.g., feedback connection between 81f and 81e).*** Neither Qi et al. nor Anand teach these additional structurally distinguishing features of the invention of claims 1 and 19.

Accordingly, withdrawal of the rejection is respectfully requested.

## **II. REJECTION OF CLAIMS 5, 7, 8, 22, 24 AND 25 UNDER 35 U.S.C. § 103(a)**

Claims 5, 7, 8, 22, 24 and 25 were rejected under 35 U.S.C. § 103(a), as being unpatentable over U.S. Patent No. 7,142,671 (Qi et al.) in view of Anand (U.S. Patent No. 7,280,657) and in view of Callum (US Patent No. 6, 985,581). Withdrawal of the rejection is respectfully requested for at least the following reasons.

As indicated above, Claims 1 and 19 are neither taught nor suggested by either Qi et al. or Anand. Claims 5, 7 and 8 depend from independent claim 1 and claims 22, 24 and 25 depend from claim 19, which are believed to be allowable over Qi et al. and Anand for, at least, the foregoing reasons. The addition of Callum fails to make up for the aforementioned deficiencies of Qi et al. and Anand with regard to independent claim 1, and thus claims 5, 7 and 8 are believed to be allowable over the suggested combination. Claims 22, 24 and 25 are thus also believed to be allowable over the suggested combination as they depend from independent claim 19.

Accordingly, withdrawal of the rejection is respectfully requested.

**III. CONCLUSION**

For at least the above reasons, the claims currently under consideration are believed to be in condition for allowance.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-1733, AMDP782US.

Respectfully submitted,  
ESCHWEILER & ASSOCIATES, LLC

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